

**ENVIRONMENTAL ASSESSMENT
FOR CONSTRUCTION OF TWO NEW TRAILS
IN THE ENTRANCE AREA OF DENALI NATIONAL PARK**

Prepared by
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DENALI NATIONAL PARK AND PRESERVE

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I. PURPOSE AND NEED

The National Park Service (NPS) is proposing to construct two new trails in the entrance area of Denali National Park and Preserve (Denali) (Figures 1&2). The McKinley Station Trail would make a pedestrian connection between the Riley Creek Campground/Mercantile area and the new Denali Visitor Center and pass by historic resource sites between the visitor center and the campground area with a routing under the railroad trestle over Riley Creek. The Meadow View trail would create a new loop trail by making a hillside connection between the Rock Creek Trail and the Roadside Path (Figures 3&4). The trails would range from 24-72 inches wide and would total 0.8 miles in length. The McKinley Station Trail would be constructed to be wheelchair accessible and would be built to Americans with Disabilities Act accessible standards. The projects would begin during the summer of 2004.

The purpose of the new trails would be to provide additional recreational and interpretive opportunities in the entrance area of Denali, to improve pedestrian and vehicle safety around the visitor center/depot and park airstrip, and to provide access to some of the floodplain resources and historic resources of the park entrance area. New trails are needed in this area because the visitor center will be a much larger focus of visitor activity than was the park hotel, the former main facility at the site. There will also likely be greater back and forth travel between the campground and the new visitor center area and some trail users would prefer to use a trail that didn't run next to the park road.

The Record of Decision for the 1997 *Entrance Area and Road Corridor Development Concept Plan* (DCP/EIS) approved a one-mile long accessible loop trail in the Riley Creek Campground area to highlight cultural resources. As part of the "Actions Common to all Alternatives" from the December, 2001 Entrance Area Environmental Assessment (2001 EA), the NPS proposed that: "New trails would include a 1-mile, accessible loop trail near the Riley Creek Campground to highlight cultural resources." No mention is made of a trail in the Meadow View area.

The decision on the DCP/EIS designated the area between the park entrance and former park hotel for increased development which would provide a variety of expanded opportunities for visitors in the entrance area and along the road corridor of the park over the next 15-20 years. The developments are limited to actions in which the NPS has traditionally specialized, such as interpretive centers, environmental education opportunities, trails, resource protection programs, and campgrounds. This concept was widely supported during public review of the DCP/EIS.

This Environmental Assessment (EA) analyzes a No Action Alternative, the NPS preferred action and another action alternative for the construction of two new interpretive trails in the entrance area of Denali National Park and Preserve and has been prepared according to the National Environmental Policy Act of 1969 and regulations of the Council of Environmental Quality (40 CFR 1508.9).

Background

The decision on the DCP/EIS designated the area between the park entrance and former park hotel for increased development which would provide a variety of expanded opportunities for visitors in the entrance area and along the road corridor of the park over the next 15-20 years. The developments are limited to actions in which the NPS has traditionally specialized, such as

interpretive centers, environmental education opportunities, trails, resource protection programs, and campgrounds.

The entrance area of Denali National Park and Preserve serves as a staging area for bus tours to the park's interior and as the primary park experience for visitors not taking a shuttle or tour bus or a private bus to a Kantishna lodge. Facilities and services in the park entrance area currently include the Wilderness Access Center (WAC, formerly Visitor Access Center), NPS interpretive programs, Riley Creek Campground, the railroad depot, the Denali Park Post Office, the airstrip, a network of hiking trails, the Riley Creek Mercantile, and support facilities for the concessionaire including a bus maintenance building, bus parking lot and employee housing.

A new visitor center, food court and bookstore have been constructed on the site of the former Denali Park Station Hotel, which closed in September 2001, and are opening in May, 2005. The new Murie Science and Learning Center (MSLC) had programs in session during 2003, and is now housed in new facilities north of the former hotel. A winter visitor contact center opened on the MSLC campus in September, 2004. A new Alaska Railroad train depot opened in 2004.

Trails in the entrance area (Figure 2) include a multi-purpose trail (to be completed in 2005) connecting the new Visitor Center with the Riley Creek Campground and Mercantile, a Roadside Path that connects the new Visitor Center with park headquarters, the Rock Creek Trail that also connects the new Visitor Center with park headquarters, the Jonesville Bridge pedestrian trail (no bikes) from the entrance of the Riley Creek Campground to the Nenana River bridge at the park boundary, a new multi-purpose trail paralleling the George Parks Highway and connecting the Nenana River bridge to the park entrance, the Mt. Healy Overlook Trail, Horseshoe Lake Trail, Taiga Loop Trail, and other trails leading to destinations off the park road. Numerous trailheads and connections between these trails are being re-established during the construction of the new visitor center complex and MSLC. A route from the Mercantile past the Riley Creek Campground to the Old Morino Roadhouse is being upgraded on existing trails, social trails and former roads. An old dirt road that connects the former Morino Campground to the base of the trestle has been used for access by the AKRR for trestle projects. That road provides a steep though stable route for hikers down to Riley Creek.

The McKinley Park airstrip is a 3000' long facility used for general aviation and administrative functions, such as research and patrols. Between the airstrip and the Visitor Center is the 200' wide exclusive use easement for the Alaska Railroad (AKRR). Pedestrian traffic at both the airstrip and railroad tracks presents safety concerns and both the NPS and AKRR would like to limit any at-grade crossing of these facilities. A chain-link fence was installed along 1,200 feet of the western middle third of the airstrip. The AKRR and pilots using the McKinley airstrip have expressed concern in the past about pedestrians crossing the tracks and airstrip where there is not an official crossing site. The Riley Creek Shuttle bus provides an opportunity to ride a free bus to go around the tracks and airstrip.

Numerous historic resources exist as ruins in the Riley Creek Campground area. Most of these date from the first third of the twentieth century when some of the lands in the entrance area were in private ownership. The ruins of two old roadhouses, a fox farm, a store, cabins and

employee “quarters,” and can dumps are located in the area, along with old trail and road systems.

Legal Context

The 1916 Organic Act directed the Secretary of the Interior and the NPS to manage national parks and monuments to:

“...conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” (16 U.S.C. 1.)

The Organic Act also granted the Secretary the authority to implement “rules and regulations as he may deem necessary or proper for the use and management of the parks, monuments and reservations under the jurisdiction of the National Park Service.” (16 U.S.C. 3.)

In 1917, Congress established Mount McKinley National Park:

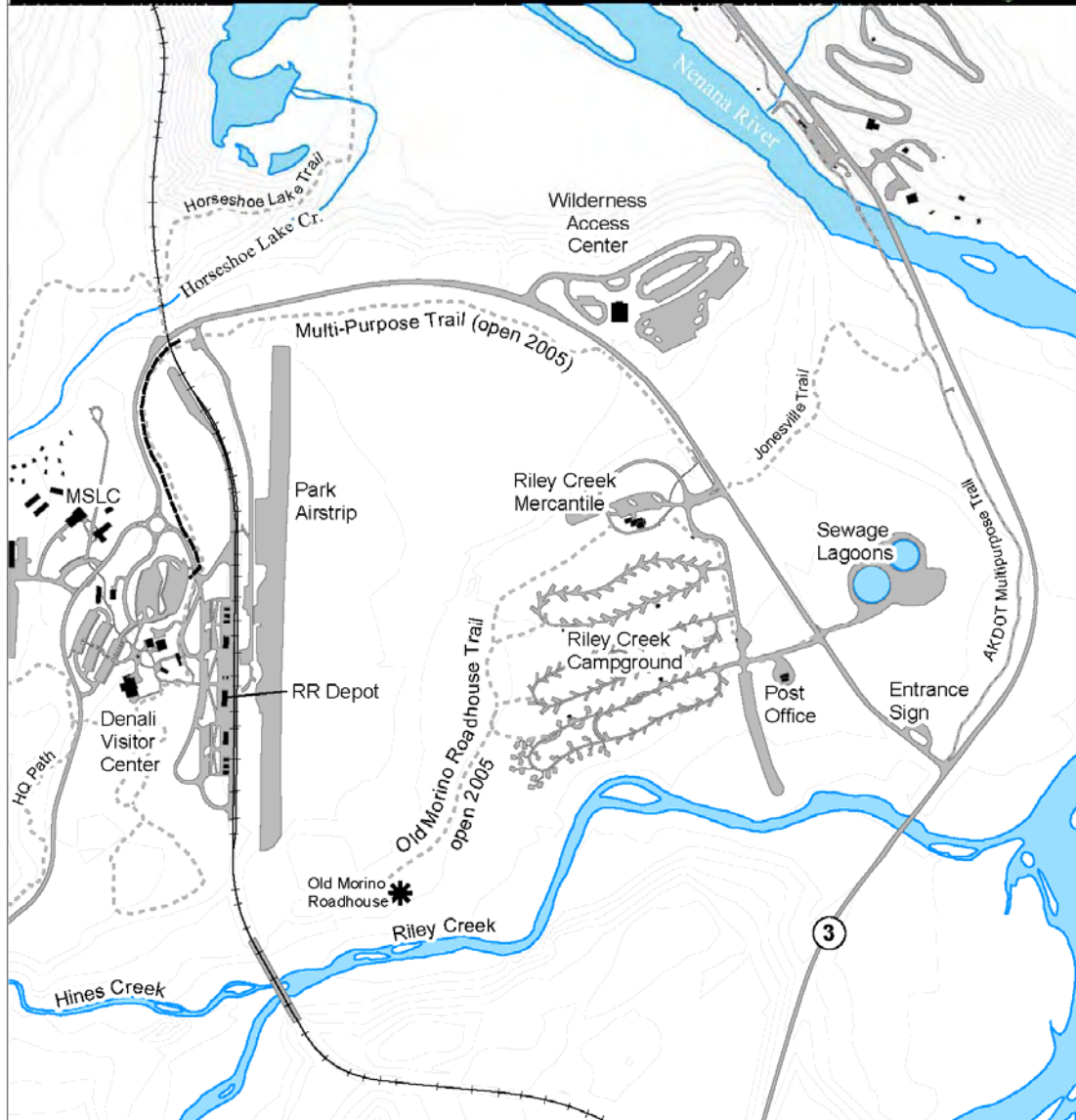
“...as a public park for the benefit and enjoyment of the people . . . for recreation purposes by the public and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof . . . said park shall be, and is hereby established as a game refuge.” (39 Statute 938)

Additions to the park were made in 1922 and 1932 to provide increased protection for park values and, in particular, wildlife. The 1932 addition moved the eastern park boundary from a north-south line near park headquarters to the western bank of the Nenana River, including a right-of-way for the Alaska Railroad. An Act in 1983 transferred federal ownership of the AKRR to the State of Alaska in 1985, giving the AKRR an exclusive use easement in the 200 foot wide right-of-way.

1978 amendments to the 1916 NPS Organic Act and 1970 NPS General Authorities Act expressly articulated the role of the national park system in ecosystem protection. The amendments further reinforce the primary mandate of preservation by stating:

“The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided for by Congress.” (16 U.S.C. 1a-1.)

Figure 2
Existing Facilities



----- Existing Trails

—+— Railroad

▬ Roads

■ Buildings



National Park Service
Denali National Park and Preserve
GIS



1,000 500 0 1,000 Feet

contour interval 25 feet

The Alaska National Interest Lands and Conservation Act of 1980 (ANILCA) added approximately 2,426,000 acres of public land to Mt. McKinley National Park and approximately 1,330,000 acres of public land as Denali National Preserve and re-designated the entirety Denali National Park and Preserve. ANILCA directs the NPS to preserve the natural and cultural resources in the park and preserve for the benefit, use, education, and inspiration of present and future generations. The Act further directs the NPS to manage for the continuation of customary and traditional subsistence uses in the park and preserve additions in accordance with provisions in Title VIII.

The NPS Organic Act and the General Authorities Act prohibit impairment of park resources and values. The 2001 NPS Management Policies uses the terms “resources and values” to mean the full spectrum of tangible and intangible attributes for which the park is established and managed, including the Organic Act’s fundamental purpose and any additional purposes as stated in the park’s establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the NPS is to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The evaluation of whether impacts of a proposed action would lead to an impairment of park resources and values is included in this environmental assessment. Impairment is more likely when there are potential impacts to a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park’s general management plan or other relevant NPS planning documents.

Issues

Issues and impact topics are identified and form the basis for environmental analysis in this EA. A brief rationale is provided for each issue or topic that is analyzed in the environmental consequences section of this EA. Issues and topics considered but not addressed in this document also are identified.

Vegetation, Wetlands, Floodplains and Soils

Trail construction would remove vegetation and soils in the project area and fill wetlands. Specific concerns include:

- Trail construction would remove white spruce mixed forest community plants.
- Soils would be removed during construction of the trail and soils exposed because of the project could be susceptible to erosion.
- Wetlands would be disturbed or filled during construction.
- Trail construction could facilitate invasion of non-native species.
- The floodplains of Riley Creek and Hines Creek would be used for trail segments.

Wildlife Values and Habitat

Trail construction and visitor use would remove wildlife habitat and affect habitat use. Specific concerns include:

- Large mammal habitat would be removed and adjacent habitat use would be affected.
- Some small-mammal and bird habitat would be removed.
- The construction activities would temporarily produce noise and activity levels that would disturb wildlife and cause them to disperse from adjacent areas during the construction period.

Cultural Resources

Trail construction and visitor use would affect known cultural resources. Specific concerns include:

- The McKinley Station Trail would lead visitors to known cultural resource sites.
- The McKinley Station Trail would provide opportunities to interpret the early history of the park.

Visitor Use and Recreation

New trails in the entrance area could affect visitor use and recreation. Specific concerns include:

- New trails would connect entrance area facilities for pedestrians.
- New trails would provide another option for pedestrians to stay off the airstrip and railroad tracks and make visitor use safer in that area.
- New trails would provide additional connections to cultural and riparian resources.

Issues Eliminated from Further Consideration

Effects on Threatened and Endangered Species

The Endangered Species Act requires an analysis of impacts on all federally listed threatened and endangered species, as well as species of special concern. In compliance with Section 7 of the Act, the U.S. Fish and Wildlife Service (USFWS) was consulted. No federally designated threatened or endangered species are known to occur within Denali National Park (pers. comm. Ted Swem, USFWS, Fairbanks, Alaska, June 9, 2000).

Air Quality

Exhaust from equipment such as chainsaws would contribute a negligible amount of air pollution due to the short duration of operation.

Sound Quality

Trail construction activities would degrade natural sounds by only a negligible-minor amount due to the context of existing background of noise from planes, trains and automobiles.

Subsistence Use

Subsistence uses are not allowed in the entrance area or on any of the lands of the former Mt. McKinley National Park, and no adverse affects to subsistence activities would occur. See Appendix A.

Wilderness Resource Values

The proposed trail is not located inside designated wilderness boundaries. The entrance area was found to be not suitable for wilderness designation (General Management Plan, NPS, 1986). Additionally, noise generated by project activities would not be expected to affect solitude in any adjacent wilderness areas.

Park Management

The trail issues related to park management are better dealt with as impacts to visitor use.

Local Communities/Socioeconomic Resources

The proposed trails would have a negligible to minor effect on local communities or local economic health. Trail construction would provide short term jobs for a few local residents within the context of other seasonal trail construction and maintenance. Although the trails would provide additional recreation opportunities in the entrance area, it would be impossible to attribute any increased visitation to the area to them.

Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This project would not result in significant changes in the socioeconomic environment of the area, and therefore is expected to have no direct or indirect impacts to minority or low-income populations or communities.

Permits and Approvals Needed to Complete the Project

A concurrence from the State Historic Preservation Officer will be required if there are potential adverse effects on cultural resources from this project.

A Section 404 permit from the Corps of Engineers for filling wetlands has been approved in Nationwide Permit #42 – Recreational Facilities. This permit does not require Corps notification for filling of less than 1/10th of an acre.

A National Park Service Wetlands Statement of Findings to evaluate wetlands impacts and prescribe mitigation measures and compensation efforts is not required for this project because trail construction with wetlands interpretation components is generally an action excepted from these requirements.

A National Park Service Statement of Findings to evaluate impacts to floodplains is not required because the establishment of foot trails in non high-hazard areas is an excepted action as it requires little physical development and does not involve overnight occupation.

II. DESCRIPTION OF THE ALTERNATIVES

Alternative 1 - Existing Conditions (No Action Alternative)

The existing trail system in the entrance area would be maintained (Figure 2). Interpretive walks out of the visitor center would be taken on existing trails. Visitors walking between the park entrance and the new visitor center would use an 8-foot wide multi-purpose trail alongside the park road opening for use in 2005. Existing trails that were disconnected during removal of the park hotel would be re-connected during 2004-2005. An upgrade of the trail/former road system connecting the Mercantile area to the Old Morino Roadhouse would be completed in 2005.

A new ten-foot wide paved multi-purpose trail was constructed by Alaska Department of Transportation in September, 2003 to connect the entrance to a new pedestrian bridge, scheduled to open in 2005, crossing the Nenana River and leading to the summer businesses of the park's northern gateway.

Actions Common to all Action Alternatives

A Meadow View Trail would be constructed between the Rock Creek Trail and the Roadside Path at approximately 1950 feet elevation - approximately 200 feet above the new visitor center (Figure 3). It would be 1640 feet long, two feet wide, and surfaced with compacted D-1 material. Two log benches would be installed at clearings along the trail.

Alternative 2 – A Shorter McKinley Station Trail with a Spur to Riley Creek (NPS Preferred)

Under this alternative a trail would be constructed from the Denali Visitor Center (DVC) through the former Morino Campground, descend upstream and then turn downstream to run high under the Alaska Railroad bridge over Riley Creek and end near the Old Morino Roadhouse ruins. At the roadhouse ruins it would connect to an existing trail being upgraded that goes to the Riley Creek Campground/Mercantile area. Approximately 100 feet of the trail would be located on the edge of a small pocket of palustrine wetlands. As part of this proposal a new trail leading down to the upper floodplain level near the Riley Creek railroad trestle would also be constructed and start near the Old Morino Roadhouse ruins. These new trails would total 2,500 feet of length and be constructed 3-6 feet wide. The trails would be designed to meet Americans with Disabilities Act (ADA) standards for compaction and gradient. Where the trail skirts the fill slope of the Alaska Railroad tracks (north of the trestle), the trail would be constructed by building a retaining wall on the lower side of the trail and filling to create the trail tread. There would not be any disturbance to the ARRC fill slope.

A 24 foot long, six foot wide covered walkway would be constructed underneath the Alaska Railroad trestle to protect pedestrians from falling debris from the tracks above. The covering would be independent of the trestle structure and would be constructed using timber frame techniques and would be built using rough cut spruce timbers stained dark brown to resemble railroad ties. No wood member would be smaller than 4" on any side to reduce the danger of

fire. The roof of the covered walkway would be galvanized corrugated metal. The timbers and roofing metal would be distressed to give the structure the appearance of being historic.

The park's trail crew would salvage as much in the way of vegetation mats as is possible during construction of the trails for use in revegetating abandoned trail segments and other disturbed areas around the new visitor center.

Alternative 3 – A Longer McKinley Station Trail

Under this alternative a trail would be constructed from the Denali Visitor Center through the former Morino Campground and descend upstream on Hines Creek, run downstream to and along the floodplain of Hines Creek and run low under the Alaska Railroad trestle over Riley Creek and end near the Old Morino Roadhouse ruins. At the roadhouse ruins it would connect to an existing trail being upgraded that goes to the Riley Creek Campground area. This new trail would be 3500 feet long, from 3-6 feet wide, and it would be gravel-surfaced and designed to Americans with Disabilities Act accessibility standards for gradient and compaction. Where the trail skirts the Alaska Railroad tracks there would not be any disturbance to the ARRC fill slope.

Approximately 700 feet of the trail would be constructed within the upper riparian zone of Riley Creek and Hines Creek. About 100 feet of the trail would be elevated one foot above the floodplain on a boardwalk where a bedrock ridge pinches close to the creek channel and where water flow is likely each summer. The boardwalk structure, 4 feet wide in this area, would be supported one foot above the channel on pipes driven into the rocky floodplain.

A 24 foot long, six foot wide covered walkway would be constructed underneath the Alaska Railroad trestle to protect pedestrians from falling debris from the tracks above. The covering would be independent of the trestle structure and would be constructed using timber frame techniques and would be built using rough cut spruce timbers stained dark brown to resemble railroad ties. No wood member would be smaller than 4" on any side to reduce the danger of fire. The roof of the covered walkway would be galvanized corrugated metal. The timbers and roofing metal would be distressed to give the structure the appearance of being historic.

The park's trail crew would salvage as much in the way of vegetation mats as is possible during construction of the trails for use in revegetating abandoned trail segments and other disturbed areas around the new visitor center.

Alternatives Considered and Eliminated from Further Evaluation

A shorter trail could be constructed between the western side of the AKRR trestle and the old Morino Campground that would be steeper than the 5% gradient limit standard for accessibility. This alternative is dismissed because it wouldn't meet the goal of providing an accessible trail to cultural resources in the area, when the terrain permits. A non-accessible old road that provides access to the bottom of the bridge already exists and pedestrian use of that old road wouldn't cause increased erosion or other impacts.

A direct route trail that uses an existing utility corridor extending westward from the Mercantile to the DVC would require the construction of a tunnel under the airstrip and railroad tracks. The

tunnel would be very expensive and would have difficult water, ice and lighting problems, as well as requiring unlikely permission from the AKRR.

Environmentally Preferred Alternative

Alternative 1 (No Action) is identified as the Environmentally Preferred Alternative because it affects the least wildlife habitat and vegetation acreage.

Mitigation and Monitoring

Mitigation measures are specific actions that when implemented reduce impacts, protect park resources, and protect visitors. The following mitigation would be implemented under each action alternative and are assumed in the analysis of effects.

Vegetation. Vegetation mats that need to be moved from the project area would be saved and moved to areas around the visitor center site that need revegetation. Areas disturbed but not part of the finished trails would be restored with native vegetation. Periodic surveys would be conducted to determine the presence of exotic plants.

Water Resources and Wetlands. At least one rest site along the trail would be devoted to interpreting wetland/floodplain values of the area.

Wildlife and Habitat. The NPS would follow established guidelines in the park's bear-human conflict management plan. The plan requires the park staff (trail crews) or contractors to use bear-proof containers for food and refuse and sets up guidelines for temporary closures.

Cultural Resources. Surveys for cultural resources have taken place in the entrance area over the past two decades. If previously unknown cultural resources were located during construction, the project would be halted in the discovery area until cultural resource staff could determine the significance of the finding. Standards for site damage and materiel/information lost would be established to limit damage to the cultural information present at the sites.

Visitor Use and Recreation. During trail construction, visitors in the area would be directed to use the new multi-purpose trail or free shuttle bus to connect between the Visitor Center and Riley Creek Campground area.

Figure 3
Alternative 2 - Proposed New Trails

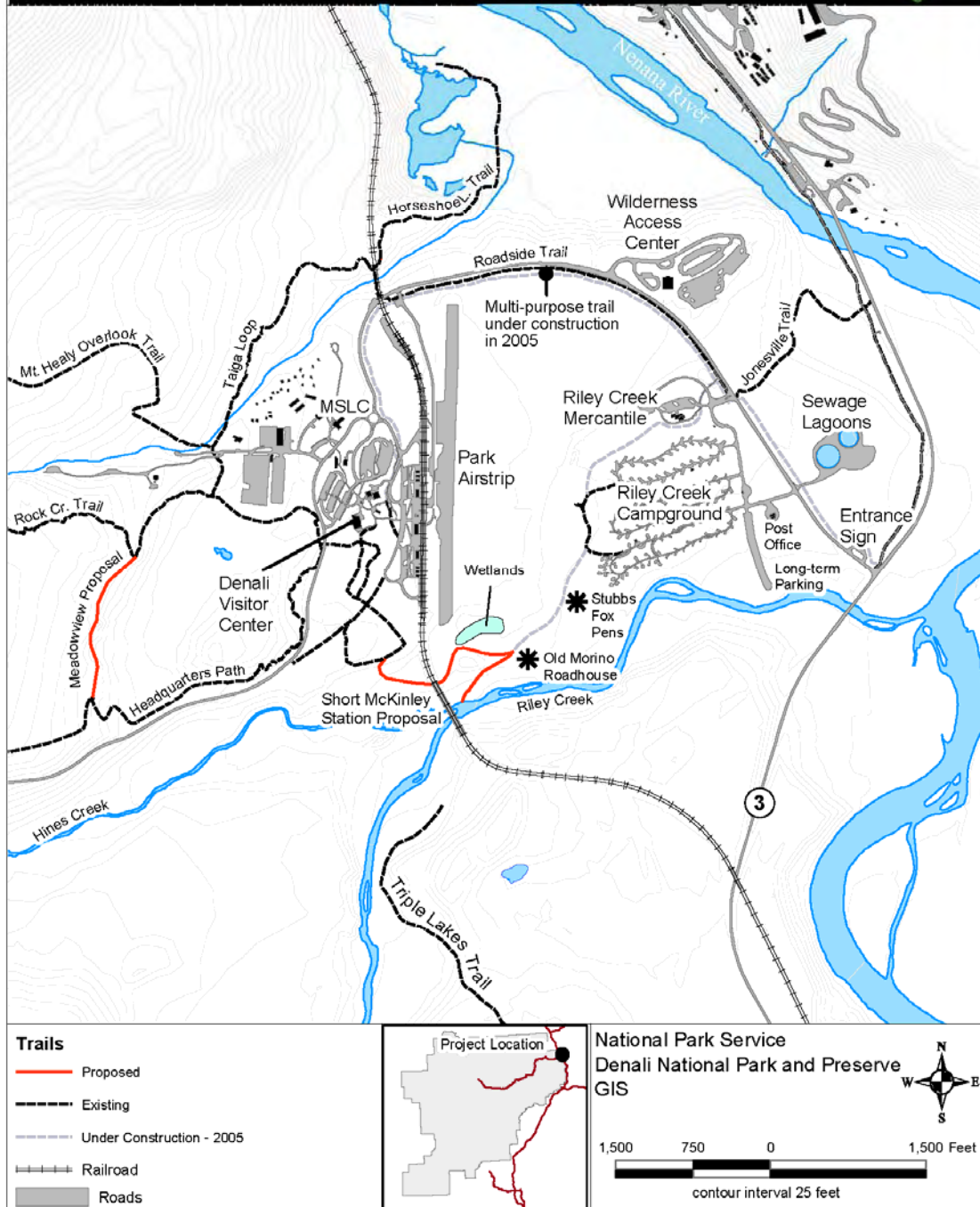
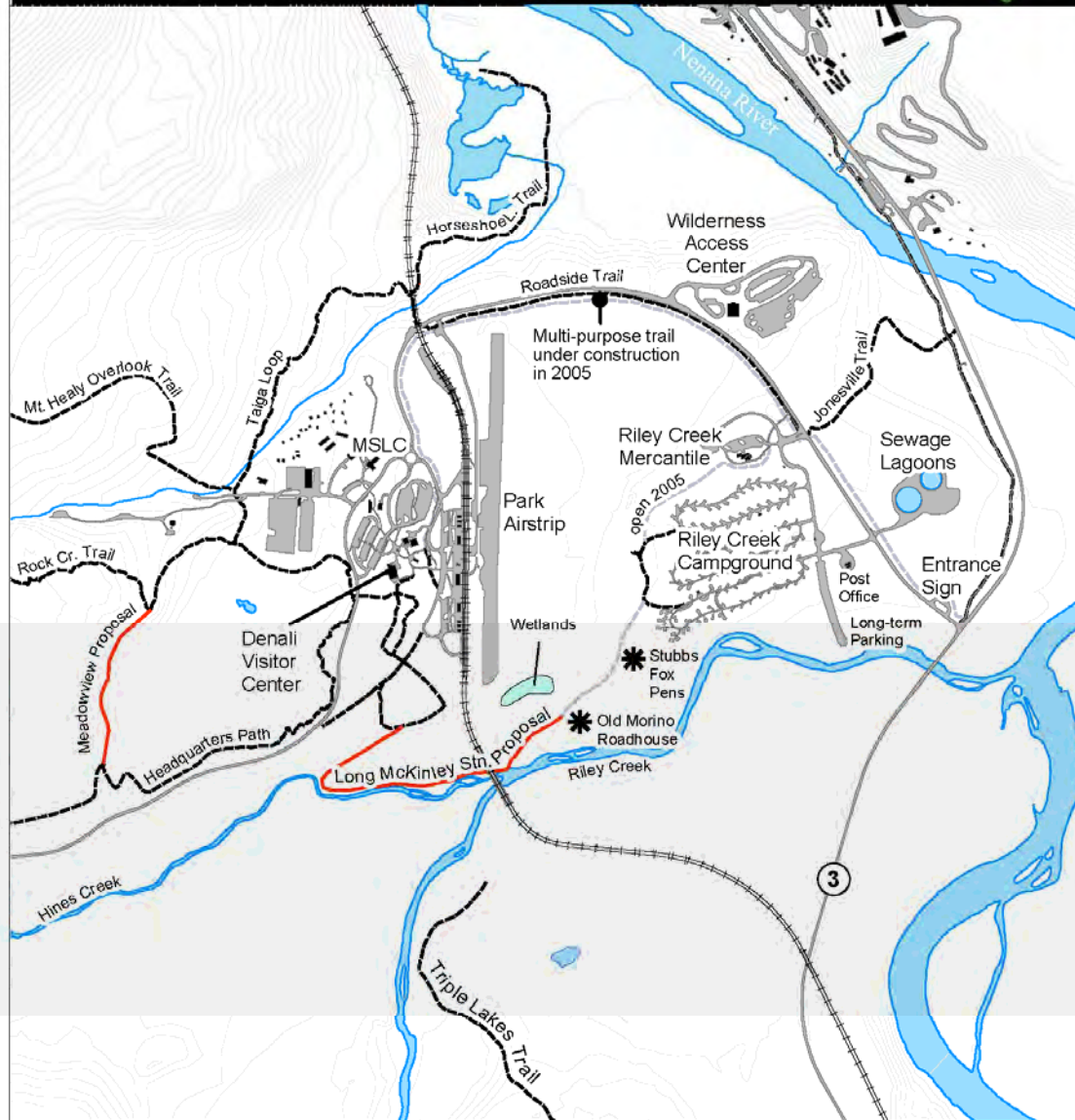


Figure 4
Alternative 2 - Proposed New Trails



Trails

- Proposed
- Existing
- Under Construction - 2005
- = Railroad
- Roads



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GIS

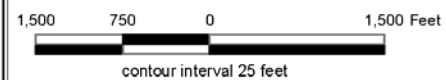


Table 1. Comparison of the Alternatives

Trail Components	Alt. 1 (No action)	Alt. 2 Shorter Trail	Alt. 3 Longer Trail
McKinley Station Trail Dimensions	n/a	2500 feet long, 3 to 6 feet wide, ADA compliant.	3500 feet long, 3 to 6 feet wide, ADA compliant
Length of Wetland and Floodplain Sections	n/a	100 feet in palustrine wetlands	700 feet in riverine floodplain.
Accessible Trail to Riley Creek Floodplain	no	Yes – from Riley Creek Campground	Yes – from Denali Visitor Center and Riley Creek Campground.
Accessible Trail to Cultural Resource Sites	Yes – from Riley Creek Campground	Yes – from Denali Visitor Center and Riley Creek Campground.	Yes – from Denali Visitor Center and Riley Creek Campground.
Meadow View Trail	n/a	1640 feet long, 2 feet wide; access not ADA compliant because of steep terrain.	1640 feet long, 2 feet wide; access not ADA compliant because of steep terrain.
Meets Purpose and Need Goals	no	Faster pedestrian connection between RCCG and DVC. Limited access to riparian resources but improved access to cultural resources	Somewhat slower pedestrian connection between RCCG and DVC. Good permanent access to riparian resources and improved access to cultural resources as well as to some additional cultural sites.

Table 2. Summary Impacts of the Alternatives

IMPACT TOPIC	Alt. 1 – No Action	Alt. 2 – Short Trail	Alt. 3 – Long Trail
Vegetation, Wetlands, Floodplains and Soils	No impact.	0.4 acres of spruce forest removed. 1/100 acre of palustrine wetlands removed. Soils affected would be used in off-site reclamation.	0.6 acres of spruce forest removed. 0.1 acre of riverine floodplain affected. Soils affected would be used in off-site reclamation
Wildlife and Habitat	Continued localized avoidance on other trails.	0.4 acres of habitat removed, with minor effect. Local avoidance during construction and use.	0.6 acres of habitat removed, with minor adverse impact to moose habitat. Local avoidance during construction and use.
Cultural Resources	No impact	Likely no impact to local resources. Positive impact from education about cultural resources.	Likely no impact to local resources. Positive impact from education about cultural resources.
Visitor Use and Recreation	A moderate adverse effect because the potential to use new loop trails would not exist and there would be no accessible trail to the riparian resources of Riley Creek.	Moderate benefits to visitors from increased opportunities for trail hiking, access to cultural resources and access to riparian resources of Riley Creek.	Moderate benefits to visitors from increased opportunities for trail hiking, access to cultural resources and enhanced access to riparian resources of Hines and Riley Creeks.

III. AFFECTED ENVIRONMENT

Detailed descriptions of the environment in the entrance area may be found in the 1986 GMP and the 1996 DCP/EIS. This section summarizes the natural and human environment that may be affected by the proposal and alternatives under consideration.

The project is located in T. 14 S., R. 7 W. in Denali National Park and Preserve. It is near the Riley Creek Campground, McKinley airstrip, and new visitor center. The area is located in the Denali front country, an area with high visitor use during the summer season.

Vegetation, Wetlands, Floodplains and Soils

Historically vegetation in the entrance area has seen change. In the 1920s, a number of fires burned over the area. By 1939, when the Park Hotel opened, mostly low shrubs and immature aspen and spruce trees dominated the area. Now taiga forest plant associations occur with mature white spruce and aspen dominating the vegetation. A variety of plant species comprise the understory, including alder, willows, Labrador tea, blueberry shrubs, and Alaska rose. Riparian zones are dominated by tall willow species, alder, and white spruce.

Three generic soil types occur in the project area. One soils type underlies upland forested areas and is gravelly or bouldery, silty soil with humus layers supporting mosses and lichens. The second soil type occurs in wetland areas with black spruce-white spruce hybrids, and it consists mostly of poorly drained silts and clays above thick gravel layers. The other soil is in the riparian areas, with a gravelly or bouldery, silty soil without a well-developed organic layer.

Mountain alder, young balsam poplar and numerous willow species dominate the vegetation in the riparian/floodplain areas of Hines and Riley Creeks. These wetlands are classified in the Cowardin Classification System (Cowardin et. al. 1979) as palustrine scrub shrub/forested, broad-leaved deciduous, temporarily flooded (PSS/FO1A) and comprise too narrow a zone to show on the maps. Short hybrids of black and white spruce dominate a small pocket of other wetlands located in the proposed project area. These wetlands are classified in the Cowardin Classification System as palustrine scrub shrub, broad-leaved deciduous, saturated (PSS1B). These wetlands are shown on Figures 3 and 4.

Riley Creek is about 60 feet wide and is generally thought of as a clear water stream, though it does have small glaciers feeding some of its tributaries. Hines Creek is a 12 foot wide non-glacial stream that drains the mountains north and south of the park road west to about mile 8. The beds of both are gravelly with cobbles and boulders. Both creeks have a period of a couple of weeks in late April-early May when the snow is melting fast and they have impressive flows. They can also respond to heavy rains anytime during the summer with flood events. In winter the ice buildup usually extends vertically and horizontally farther than any flood event, so that much of the existing floodplain is, on average, only affected by the disturbance effects of winter ice and by the water flows that start on top of the ice at the beginning of break-up. Areas of the floodplain that are usually only affected by ice often have a scattered cover of willows, mountain alder and young balsam poplar, with a small number of forbs and little moss growth.

Wildlife Values and Habitat

The most common wildlife species in the project area are red fox, snowshoe hares, red squirrels, and various birds such as chickadees, ravens, magpies, and numerous migratory species. The area also provides moose habitat, including willow browse along Hines and Riley Creeks and the perimeter of built-up areas, and including potential cover for calving areas. Cover is especially important during the first weeks of a moose calf's life as a place near food sources where a cow and her calf can go when resting. The growing season starts a little earlier at lower elevations such as in the entrance area, and this area provides cover during late May to complement the more nutritious food sources. Grizzly bears are attracted to the area during moose calving season. Wetland areas can provide important foraging areas for moose and habitat for small mammals, migratory and resident birds.

Cultural Resources

Cultural resources in the park entrance area include archeological sites and historic buildings and structures. Approximately 25 cultural sites and features are located in the entrance area. Historic sites associated with the McKinley Park Station community date from the first third of the twentieth century when some of the lands in the entrance area were in private ownership. The ruins of two old roadhouses, a fox farm, a store, cabins and employee "quarters," and can dumps are located in the area, along with old trail and road systems.

Visitor Use and Recreation

Around 440,000 people visit Denali's entrance area annually. About 300,000 people take a bus trip beyond the Savage River check station into the park interior and the remaining visitors remain in the front country area, seeing this section of the park by the Savage Shuttle, private car, by bicycle, or on foot. Park bus use has remained steady since 1999, but visitation of all types is expected to increase over the next 10-15 years. The new visitor center and Denali Science and Learning Center should both enhance visits and recreational and educational opportunities.

During the summer months there is a lot of day-hiking activity in the entrance area, both on maintained trails and on game trails and the abandoned roads and trails that had activity during the 1920s. Maintained trails include the Horseshoe Lake Trail, Healy Overlook Trail, Rock Creek Trail, Roadside Path, Jonesville Bridge Trail, Taiga Loop, the new multi-purpose trail that will be finished in 2005 between the entrance and new visitor center and the upgrade of the trails between the Mercantile and the Old Morino Roadhouse.

In addition to the bus systems that provide access to the interior of the park, the NPS runs a bus every 20 minutes that runs a loop through the area, connecting the DVC, Murie Science and Learning Center, railroad depot, WAC and Riley Creek Campground and Mercantile. Many of the local businesses also run a bus or van either on a schedule or at least regularly into the entrance area. Bicycle use is restricted to the park road, campground roads, and to the multi-purpose trail.

The Riley Creek Campground has 145 campsites and an outdoor amphitheater where evening naturalist programs are presented. The Mercantile was opened in 2001 and provides camper supplies, showers, an RV dump station and espresso. A long-term parking lot is adjacent to the Riley Creek Campground.

IV. ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

Assumptions for Impact Analysis

This section contains an evaluation of the direct and indirect environmental impacts of three action alternatives and the no action alternative. The analysis assumes that the mitigation identified in the *Mitigation and Monitoring* section (page 10) of this environmental assessment would be implemented under any of the action alternatives.

Cumulative impacts were analyzed to add up the incremental impacts to the environment resulting from adding the alternatives to other past, present, and reasonably foreseeable future actions. The cumulative impacts relate primarily to: (1) the continued implementation of the visitor and educational facility improvements proposed in the Entrance Area EA of December, 2001, (2) the implementation of a hazardous fuels management plan to limit the amount of vegetation around all park buildings to reduce the chance that wildland fires would endanger park structures, and (3) use of existing and in-progress facilities, including the new AKDOT pedestrian bridge over the Nenana River, the new multi-purpose trail connecting that bridge to the junction of the park road with the George Parks Highway, the new multi-purpose trail connecting the park entrance to the new visitor center, and the upgrade on the trails connecting the Mercantile to the Old Morino Roadhouse.

Alternative 1 – Existing Conditions (No Action)

Vegetation, Wetlands and Soils

No vegetation, wetlands, floodplain resources or soils would be removed or disturbed to preserve the status quo.

Wildlife Values and Habitat

No additional habitat would be lost for small mammals, birds, and moose. Continued visitor and employee use of the existing trails would result in continued local avoidance of those corridors by moose, lynx, bears and other wary animals.

Cultural Resources

No known cultural resources would be affected under this alternative.

Visitor Use and Recreation

There would be no constructed trail making a short loop that connects the Rock Creek Trail and the Roadside Path. There would be no trail leading to the floodplains of Hines Creek or Riley Creek. All pedestrians who want to use a trail to get to the historic resources near the Old Morino Roadhouse would need to access those resources from the Riley Creek Campground. Those pedestrians desiring to use a trail between the Riley Creek Campground and the new Visitor Center would not have a maintained alternative that doesn't run alongside the park road, and may choose instead to cut across the airstrip and railroad tracks. All of these items would have a minor adverse effect on park visitor use. Pedestrians at the DVC would use the new trail connections and the short interpretive loop just south of the building. Use on the upgraded trail

between the Mercantile and the Old Morino Roadhouse would increase when the work is finished. These upgrades would have a beneficial effect on visitor use opportunities.

Cumulative Effects: The impacts of this alternative to natural and cultural resources such as vegetation and wildlife habitat would be minimal to non-existent and there would not be a contribution to any impacts from other local or regional projects.

Conclusion: Existing trails would be maintained under this alternative. Visitor opportunities to either hike this area with a quality trail experience would remain limited.

In summary, this alternative would not impair park resources, but it also would not achieve the objectives to provide a quality experience for pedestrians visiting park destinations in the entrance area.

Alternative 2 – A Shorter McKinley Station Trail with a Spur to Riley Creek (NPS Preferred)

Vegetation, Wetlands, Floodplains and Soils

Under this alternative approximately 0.4 acre of white spruce-mixed forest community would be removed for the construction of the short McKinley Station Trail and the Meadow View Trail. The limited vegetation removal from this alternative would not have a significant impact on the thousands of acres of taiga forest and other vegetation resources near the park entrance area.

Approximately 600 square feet (0.01 acre) of palustrine forested, needle-leaved evergreen, saturated soil wetlands would be removed during trail construction. These wetlands were determined by the U.S Army Corps of Engineers to *not* be jurisdictional wetlands requiring a Clean Water Act, Section 404 fill permit because these wetlands are not directly connected to any navigable waters of the USA (Don Rice, personal communication). This type of wetland is common locally and regionally and the filling of 1/100th of an acre would not affect the flood retention, habitat or other values received from wetlands.

The trail itself would not be built on the floodplain as it would dead end at the east side of the AKRR easement, directly below the path of the McKinley Station Trail. The noise and commotion from the construction of a spur trail to the floodplain of Riley Creek would cause a temporary disturbance to wildlife using that area and would have a negligible effect on floodplain resources.

A few inches of organic soil attached to the vegetation would be removed from the length of the trail. The soil types in the wetlands and uplands are common under black spruce and white spruce forests. The soils would be saved for use in the reclamation of nearby trails to be abandoned.

Cumulative Effects: Commercial and private development as well as the growth of transportation and utility systems in and near the Denali frontcountry have resulted and would continue to result in the loss of several hundred acres of spruce forest, especially in the Nenana River corridor outside the park boundary. Additional commercial and private development along the Nenana River corridor is expected to result in the disturbance of hundreds of acres of vegetation

and soils during the foreseeable future. Minor loss of and disturbance to vegetation and soil in the park entrance area and along the park road corridor has occurred because of previous development, primarily visitor facilities and construction and maintenance of roads and trails. The total disturbance in the park development zone between the Nenana River and new Visitor Center is about 85 acres out of about 1000 acres. This includes acres of cleared vegetation for the George Parks Highway, Denali Park Road, VAC, Visitor Center, MSLC, Riley Creek Campground, Riley Creek Mercantile, sewer treatment plant, airstrip, railroad, Morino Campground, bus maintenance facilities, concession housing, and area trails. An additional 15 acres of vegetation clearing is expected under the hazardous fuels management plan to remove hazardous fuel around park buildings. The incremental impact to vegetation and soils in the entrance area from implementation of this trail project would be less than 1% of the total disturbance in the park entrance area. These incremental impacts would not result in significant cumulative impacts on vegetation and soils.

About 4.1 acres of wetlands have been impacted by previous road, trail, and building construction in the park entrance area. The entrance area of the park between the new Visitor Center and the Nenana River contains about 25 acres of similar non-jurisdictional wetlands. This project would further impact 0.01 acre of wetlands in the entrance area for a total displacement of 4.1 acres out of about 25 acres of wetlands in the immediate entrance area, or about 18%. Because the area of wetlands adversely impacted would be small and the relative wetlands value is low, there would be only a minor loss of wetlands or wetlands function in the park.

Conclusion: Under this alternative less than 1/100th acre of hybrid black spruce-white spruce forest community would be removed for the construction of the multi-purpose trail. An additional 0.4 acres of white spruce-mixed forest community would also be removed. The clearing of trees, shrubs, other vegetation, and the disturbance to soil on less than one-half acre would result in a limited adverse impact to vegetation and soil. The clearing of 0.01 acres of palustrine forested wetlands for the trail construction would result in a minor net loss of wetlands and wetlands functions in the park entrance area. These impacts would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Wildlife and Habitat

Wildlife habitat for large mammals, small mammals, and birds would be reduced by approximately 0.4 acres, including 0.01 acre of wetland wildlife habitat. There would be a minor increase in impacts to local moose calving habitat during late May because even though the proposal would remove or cause disturbance in some browsing areas, the trails would not remove habitat critical as cover for calves. During the construction period noise and human activity would disturb wildlife and cause them to be temporarily displaced from the affected and adjacent areas. There are no known raptor nests along the proposed alignment. Both small mammals and birds would find extensive acreage of similar habitat adjacent to the trail acreage lost.

Cumulative Effects: Approximately 85 acres of wildlife habitat has been disturbed in the entrance area between park headquarters and the Parks Highway. This includes acres of cleared vegetation for the VAC, Riley Creek Campground, Riley Creek Mercantile, water treatment plant, airstrip, railroad depot, park road, Visitor Center complex, and MSLC. An additional 15 acres of vegetation

clearing is expected under the hazardous fuels management plan to remove hazardous fuel around park buildings. The incremental impact from this project to wildlife and habitat in the entrance area would add less than 1% to the total existing disturbed area near the park entrance. Because thousands of acres of similar habitat exist in the vicinity, there exists a moderate cumulative impact on wildlife and habitat in the park entrance area and this alternative would be a minor contributor to that impact.

Conclusion: The clearing of trees, shrubs, and other vegetation comprising 0.4 acres of wildlife habitat would result in minor adverse impacts on wildlife and habitat. The impact to wildlife and habitat would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Cultural Resources

The McKinley Station Trail would provide an additional maintained route to known cultural resource sites, such as the Old Morino Roadhouse, the fox farm and the Riley Creek Railroad trestle. Other sites below the “New” Morino Roadhouse that may have been used by roadhouse employees during the 1920s would be adjacent to some of the new sections of trail and would be more available for interpretive discussions of the early park history. These opportunities to highlight human history of the area would have a beneficial effect on expanding the understanding of the benefits of preserving cultural resources. Standards for site damage and materiel/information lost would be established in collaboration with the State Historic Preservation Officer to limit damage to the cultural information present at the sites.

The proposed project would not adversely impact known cultural resources. Historic sites that have been affected by modern activities, mainly accidental fire, include the Morino Roadhouse and Kennedy site. Should presently unidentified cultural resources be discovered during the project, the superintendent and cultural resources manager would be notified immediately. Work would halt until an assessment of the significance of the resources is made and would not resume without the approval of the superintendent.

Cumulative Effects: All known significant archeological and historic sites in the entrance area would remain intact. The beneficial impacts from this project to highlighting human history in this area would add to previous exhibits at visitor centers, trail signs and interpretive history programs to provide a moderate increase in knowledge and awareness and protection of cultural resources.

Conclusion: The project would provide opportunities to highlight human history of the area and would have a beneficial effect on expanding the understanding of the benefits of preserving cultural resources. It would not result in an impairment of park cultural resources that fulfill specific purposes identified in legislation establishing the park and effects would be consistent with the mandates of the NHPA.

Visitor Use and Recreation

There would be a 2-month long impact to recreational opportunities for entrance area visitors from the construction activities, such as hauling gravel, for the new trails. Noise and visual impacts in the construction areas would temporarily inconvenience park visitors, especially on the Rock Creek Trail and Headquarters Path during construction of the Meadow View Trail.

Visitor safety would be enhanced by providing a shorter trail between the RCCG and the DVC than presently exists. This would provide a safety valve for some of the users who otherwise are inclined to cut across the airstrip and railroad tracks. This trail would also serve to complete a likely popular loop option with the Multiple-Use Trail connecting the RCCG and the DVC. Visitor use opportunities in the developed area would benefit by providing a trail that connects the DVC with the Stubbs and Morino cultural resource sites otherwise reachable only from the RCCG. Visitor enjoyment would be enhanced by providing an access route to the dynamic geomorphic and biological resources of the Riley Creek streamside, among other natural features, though the trail would not pass through the riparian zone. Visitor recreational opportunities would also be increased by creating the Meadow View Trail as a nice hour-long hiking opportunity in the DVC area for those people who want to get away from roadside trails but don't have all afternoon for the activity. Although the Meadow View trail would be built to accessible standards, the steeper connections to it along the existing Headquarters Path and the Rock Creek Trail would remain non-standard due to terrain constraints.

Cumulative Effects: Additional projects to enhance recreational opportunities in the eastern end of the park are recently opened or are under construction. They would include the new Visitor Center, Murie Science and Learning Center, new or upgraded hiking trails, a skiing trail in the Headquarters area, rehabilitated and new campsites at the Riley Creek Campground, and the railroad depot reconfiguration. The moderate beneficial impacts of the proposed McKinley Station Trail and the Meadow View Trail would add to impacts from past projects in the entrance area, all of which contribute a moderate beneficial impact to benefit park visitor experiences and recreational opportunities.

Conclusion: This alternative would enhance visitor safety in Denali's entrance area and would provide visitors with additional loop trail opportunities that could be used for point-to-point movement or for a recreational experience. The impacts to visitor use would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Alternative 3 – Construct a Longer McKinley Station Trail

Vegetation, Wetlands, Floodplains and Soils

Under this alternative approximately 0.6 acre of white spruce-mixed forest community would be removed for the construction of the long McKinley Station Trail and the Meadow View Trail. The limited vegetation removal from this alternative would not have a significant impact on the thousands of acres of taiga forest and other vegetation resources within 5 miles of the park entrance area.

Approximately 4200 square feet (0.1 acre) of the trail would be constructed within the upper riparian zone of Hines Creek. The part of the trail in the Riley Creek floodplain would be in the area of disturbance under the trestle on the AKRR easement and the impact to floodplain resources would be negligible. The 100 feet of the trail along Hines Creek that would be elevated by one foot on a boardwalk would allow use of an area that may be flooded annually without installing a structure that would disrupt the flooding. The floodplain of Hines Creek is subject to winter ice buildup and summer floods that create annual natural disturbance to floodplain resources. The annual icing and occasional flooding strips away most soil build-up so that much of the floodplain to be used by the trail is very gravelly, though uneven. The 100 feet of the trail along Hines Creek that would be elevated by one foot on a boardwalk would allow use of a limited area that may be flooded annually without installing a structure that would disrupt the flooding. Much of the vegetation is immature, as the thin, bouldery soil does not hold mature vegetation or support a moss layer or soil profile in all but a few unconnected pockets. The routing of a trail through part of the floodplain would cause only a minor adverse impact to floodplain stability, erosion control and wetland vegetation. This type of riparian wetland is common on many local and regional streams of this size and gradient, and the filling of 1/10th of an acre would not affect the flood retention, habitat or other values received from riparian wetlands.

A few inches of organic soil attached to the vegetation would be removed from the length of the trail. The soil types in the uplands are common under white spruce forests. The soils would be saved for use in the reclamation of nearby trails to be abandoned.

Cumulative Effects: Commercial and private development as well as the growth of transportation and utility systems in and near the Denali frontcountry have resulted and would continue to result in the loss of several hundred acres of spruce forest, especially in the Nenana River corridor outside the park boundary. Additional commercial and private development along the Nenana River corridor is expected to result in the disturbance of hundreds of acres of vegetation and soils during the foreseeable future. Minor loss of and disturbance to vegetation and soil in the park entrance area and along the park road corridor has occurred because of previous development, primarily visitor facilities and construction and maintenance of roads and trails. The total disturbance in the park development zone between the Nenana River and new Visitor Center is about 85 acres. This includes acres of cleared vegetation for the George Parks Highway, Denali Park Road, VAC, Visitor Center, MSLC, Riley Creek Campground, Riley Creek Mercantile, sewer treatment plant, airstrip, railroad, Morino Campground, bus maintenance facilities, concession housing, and area trails. An additional 15 acres of vegetation clearing is expected under the hazardous fuels management plan to remove hazardous fuel around park buildings. The incremental impact to vegetation and soils in the entrance area from implementation of this trail project would be less than 1% of the total disturbance in the park entrance area. These incremental impacts would not result in significant cumulative impacts on vegetation and soils.

About 4.1 acres of wetlands have been impacted by previous road, trail, and building construction in the park entrance area. The entrance area of the park between the new Visitor Center and the Nenana River contains about 25 acres of similar non-jurisdictional wetlands. This project would further impact 0.1 acre of wetlands in the entrance area for a total displacement of

4.2 acres out of about 25 acres of wetlands in the immediate entrance area, or about 17%. Because the area of wetlands adversely impacted would be small and the relative wetlands value is low, there would be only a minor loss of wetlands or wetlands function in the park.

Conclusion: Under this alternative 0.6 acres of white spruce-mixed forest community would be removed for trail construction. The clearing of trees, shrubs, other vegetation, and the disturbance to soil on less than one acre would result in a limited adverse impact to vegetation and soil. The clearing of 0.1 acres of riparian wetlands for the trail construction would result in a minor net loss of wetlands and wetlands functions in the park entrance area. These impacts would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Wildlife and Habitat

Wildlife habitat for large mammals, small mammals, and birds would be reduced by approximately 0.6 acres, including 0.1 acre of riparian wetland wildlife habitat. There would be a minor increase in impacts to local moose calving habitat during late May because even though the proposal would remove or cause disturbance in some browsing areas, the trails would not remove habitat critical as cover for calves. During the construction period noise and human activity would disturb wildlife and cause them to be temporarily displaced from the affected and adjacent areas. There are no known raptor nests along the proposed alignment. Both small mammals and birds would find extensive acreage of similar habitat adjacent to the trail acreage lost.

Cumulative Effects: Approximately 84 acres of wildlife habitat has been disturbed in the entrance area between park headquarters and the Parks Highway. This includes acres of cleared vegetation for the VAC, Riley Creek Campground, Riley Creek Mercantile, water treatment plant, airstrip, railroad depot, park road, Visitor Center complex, and MSLC. An additional 15 acres of vegetation clearing is expected under the hazardous fuels management plan to remove hazardous fuel around park buildings. The incremental impact from this project to wildlife and habitat in the entrance area would add less than 1% to the total existing disturbed area near the park entrance. Because thousands of acres of similar habitat exist in the vicinity, there exists a moderate cumulative impact on wildlife and habitat in the park entrance area and this alternative would be a minor contributor to that impact.

Conclusion: The clearing of trees, shrubs, and other vegetation comprising 0.6 acres of wildlife habitat would result in minor adverse impacts on wildlife and habitat. The impact to wildlife and habitat would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Cultural Resources

The McKinley Station Trail would provide additional routes to known cultural resource sites, such as the Old Morino Roadhouse, the fox farm and the Riley Creek Railroad trestle. More sites than in the Alternative 2 trail below the former Morino Campground that may have been used by roadhouse employees during the 1920s would be adjacent to some of the new sections of trail and would be more available for interpretive discussions of the early park history. These opportunities to highlight human history of the area would have a beneficial effect on expanding the understanding of the benefits of preserving cultural resources.

Should presently unidentified cultural resources be discovered during the project, the superintendent and cultural resources manager would be notified immediately. Work would halt until an assessment of the significance of the resources is made and would not resume without the approval of the superintendent.

Cumulative Effects: The proposed project would not adversely impact known cultural resources. Historic sites that have been affected by modern activities, mainly accidental fire, include the Morino Roadhouse and Kennedy site. All known significant archeological and historic sites in the entrance area would remain intact, and mitigation standards would be established to limit any damage to the cultural information present at the sites.

Conclusion: The project would provide opportunities to highlight human history of the area and would have a beneficial effect on expanding the understanding of the benefits of preserving cultural resources. The project would not result in an impairment of park cultural resources that fulfill specific purposes identified in legislation establishing the park and effects would be consistent with the mandates of the NHPA.

Visitor Use and Recreation

There would be a 2-month long impact to recreational opportunities for entrance area visitors from the construction activities, such as hauling gravel, for the new trails. Noise and visual impacts in the construction areas would temporarily inconvenience park visitors, especially on the Rock Creek Trail and Headquarters Path during construction of the Meadow View Trail.

Safety for local hikers would be enhanced by providing another alternative between the RCCG and the DVC than presently exists. This would provide a safety valve for some of the users who otherwise would be inclined to cut across the airstrip and railroad tracks. This trail would also serve to complete a likely popular loop option with the Multiple-Use Trail connecting the RCCG and the DVC. Visitor use opportunities in the developed area would benefit by providing a trail that connects the DVC with the Stubbs and Morino cultural resource sites otherwise reachable only from the RCCG. Visitor enjoyment would be increased by providing for a trail opportunity that can highlight the dynamic geomorphic and biological resources of the Hines Creek streamside.

Visitor recreational opportunities would also be increased by creating the Meadow View Trail as a nice hour-long hiking opportunity in the DVC area for those people who want to get away from roadside trails but don't have all afternoon for the activity. The new Meadow View Trail would add a nice hour-long hiking opportunity in the DVC area for those people who want to get away from roadside trails but don't have all afternoon for the activity. Although the Meadow View trail would be built to accessible standards, the steeper connections to it along the existing Headquarters Path and the Rock Creek Trail would remain non-standard due to terrain constraints.

This alternative would provide an accessible connection from both the DVC and the RCCG to a potential new bridge site on Hines Creek for a re-routed Triple Lakes Trail.

Cumulative Effects: Additional projects to enhance recreational opportunities in the eastern end of the park are recently opened or are under construction. They would include the new Visitor Center, Murie Science and Learning Center, new or upgraded hiking trails, a skiing trail heading

west from park headquarters, rehabilitated and new campsites at the Riley Creek Campground, and the railroad depot reconfiguration. The moderate beneficial impacts of the proposed McKinley Station Trail and the Meadow View Trail would add to impacts from past projects, all of which contribute a moderate beneficial impact to benefit park visitor experiences and recreational opportunities.

Conclusion: This alternative would enhance visitor safety in Denali's entrance area and would provide visitors with trails that could be used for point-to-point movement or for a recreational experience. The impacts to visitor use would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

CONSULTATION AND COORDINATION

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APPENDIX A
SUBSISTENCE - SECTION 810(a) OF ANILCA
SUMMARY EVALUATION AND FINDINGS

I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluation of potential restrictions to subsistence activities that could result from the construction of two new trails in the entrance area of Denali National Park and Preserve.

II. THE EVALUATION PROCESS

Section 810(a) of ANILCA states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands . . . the head of the federal agency . . . over such lands . . . shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency -

(1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to section 805;

(2) gives notice of, and holds, a hearing in the vicinity of the area involved; and

(3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

ANILCA created new units and additions to existing units of the National Park System in Alaska. Denali National Park and Preserve was created by ANILCA Section 202(3)(a):

"The park additions and preserve shall be managed for the following purposes, among others: To protect and interpret the entire mountain massif, and additional scenic mountain peaks and formations; and to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans and other waterfowl; and to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities."

Title I of ANILCA established national parks for the following purposes:

" . . . to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species of inestimable value to the citizens of Alaska and the Nation, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on free-flowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems.

" . . . consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this Act, to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so."

The potential for significant restriction must be evaluated for the proposed action's effect upon " . . . subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use. . . ." (Section 810(a))

III. PROPOSED ACTION ON FEDERAL LANDS

Alternatives 1 through 3 are described in detail in the environmental assessment. Customary and traditional subsistence use on NPS lands will continue as authorized by federal law under all alternatives. Federal regulations implement a subsistence priority for rural residents of Alaska under Title VIII of ANILCA.

The NPS proposes to create two recreational trails totaling 0.8 mile within the entrance area of Denali National Park and Preserve. The site is in the former Mount McKinley National Park wherein subsistence activities are not allowed.

IV. AFFECTED ENVIRONMENT

Subsistence uses within Denali National Park and Preserve are permitted in accordance with Titles II and VIII of ANILCA. Section 202(3)(a) of ANILCA authorizes subsistence uses, where traditional, in the northwestern and southwestern preserves of Denali National Preserve. Lands within former Mount McKinley National Park are closed to subsistence uses.

A regional population of approximately 300 eligible local rural residents qualifies for subsistence use of park resources. Resident zone communities for Denali National Park and Preserve are Cantwell, Minchumina, Nikolai, and Telida. By virtue of their residence, local rural residents of

these communities are eligible to pursue subsistence activities in the new park additions. Local rural residents who do not live in the designated resident zone communities, but who have customarily and traditionally engaged in subsistence activities within the park additions, may continue to do so pursuant to a subsistence permit issued by the Park Superintendent in accordance with state law and regulations.

The NPS realizes that Denali National Park and Preserve may be especially important to certain communities and households in the area for subsistence purposes. The resident zone communities of Minchumina (population 22) and Telida (population 11) use park and preserve lands for trapping and occasional moose hunting along area rivers. Nikolai (population 122) is a growing community and has used park resources in the past. Cantwell (population 147) is the largest resident zone community for Denali National Park and Preserve, and local residents hunt moose and caribou, trap, and harvest firewood and other subsistence resources in the new park area.

The main subsistence species, by edible weight, are moose, caribou, furbearers, and fish. Varieties of subsistence fish include coho, king, pink and sockeye salmon. Burbot, dolly varden, grayling, lake trout, northern pike, rainbow trout and whitefish are also among the variety of fish used by local people. Beaver, coyote, land otter, weasel, lynx, marten, mink, muskrat, red fox, wolf and wolverine are important furbearer resources. Rock and willow ptarmigan, grouse, ducks and geese complete the park/preserve subsistence small game list.

The NPS recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in any given year may vary considerably from previous years because of such factors as weather, migration patterns and natural population cycles. However, the pattern is assumed to be generally applicable to harvests in recent years with variations of reasonable magnitude.

V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources that could be impacted.

The evaluation criteria are:

- the potential to reduce important subsistence fish and wildlife populations by (a) reductions in numbers; (b) redistribution of subsistence resources; or (c) habitat losses;
- the affect the action might have on subsistence fishing or hunting access; and
- the potential to increase fishing or hunting competition for subsistence resources.

The potential to reduce populations:

Construction and use of a two new trails in the entrance area would have a long-term but minor impact on wildlife habitat and populations. The use of the trails would supplant existing use by pedestrians on the Roadside Path and by some pedestrians presently crossing the airstrip and railroad tracks..

The alternatives would not adversely affect the distribution or migration patterns of subsistence resources. Therefore, no change in the availability of subsistence resources is anticipated as a result of the implementation of this proposed action.

Restriction of Access:

All rights of access for subsistence harvests on NPS lands are granted by Section 811 of ANILCA. Denali National Park and Preserve is managed according to legislative mandates, NPS management policies and the park's General Management Plan. No actions under the alternatives described in the environmental assessment should affect the access of subsistence users to natural resources in the park and preserve.

Increase in Competition:

The alternatives should not produce any increase in competition for resources to subsistence users.

If, and when, it is necessary to restrict taking, subsistence uses are the priority consumptive users on public lands of Alaska and will be given preference on such lands over other consumptive uses (ANILCA, Section 802(2)).

Continued implementation of provisions of ANILCA should mitigate any increased competition, however significant, from resource users other than subsistence users. Therefore, the proposed action would not adversely affect resource competition.

VI. AVAILABILITY OF OTHER LANDS

Choosing a different alternative would not decrease the impacts to park resources for subsistence. The preferred alternative is consistent with the mandates of ANILCA, including Title VIII, and the NPS Organic Act.

VII. ALTERNATIVES CONSIDERED

The alternatives considered for this project were limited to the lands in the entrance area to the park. The alternatives are: 1) continue the existing conditions (No Action) which includes use of the Multi-Purpose Trail by pedestrians between the Visitor Center and the RCCG area; 2) construction of a new 1640 foot Meadow View Trail west of the visitor Center and a 1800 foot McKinley Station Trail between the Visitor Center and the RCCG area and a 700 foot trail segment from the RCCG area to the water level near the Junction of Hines Creek and Riley Creek; and 3) construction of a new 700 foot Meadow View Trail west of the visitor Center and an 3500 foot McKinley Station Trail between the Visitor Center and the RCCG area

VIII. FINDINGS

This analysis concludes that the preferred alternative would not result in a significant restriction of subsistence uses.

